

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (previously presented): The liquid composition of claim 16, wherein said biomolecules are uniformly distributed throughout said colloidal suspension.

Claim 7 (previously presented): The liquid composition of claim 16, wherein more than one species of biomolecule is distributed throughout said colloidal suspension and bound to said matrix material particles.

Claim 8 (original): The liquid composition of claim 7, wherein said more than one species of biomolecule comprise two or more different biomolecule probes.

Claim 9 (previously presented): The liquid composition of claim 7, wherein said more than one species of biomolecule comprise one or more biomolecule probes and a blocking biomolecule, wherein said blocking biomolecule blocks sites on said biomolecule-binding matrix material not occupied by said one or more biomolecule probes.

Claim 10 (previously presented): The liquid composition of claim 16, wherein said binding of said biomolecules is covalent binding.

Claim 11 (previously presented): The liquid composition of claim 16, wherein said binding of said biomolecules is non-covalent binding.

Claim 12 (previously presented): The liquid composition of claim 16, wherein said binding of said biomolecules is electrostatic binding.

Claim 13 (previously presented): The liquid composition of claim 16, wherein said binding of said biomolecules is adsorption onto a surface of said matrix material particles.

Claim 14 (canceled)

Claim 15 (currently amended): The liquid composition of ~~claim 14~~ claim 18, wherein a second reference dye is distributed throughout said colloidal suspension and wherein a concentration of said second reference dye has a known quantitative relationship with said biomolecule.

Claim 16 (currently amended): A liquid composition comprising
a colloidal suspension of a biomolecule-binding matrix material dispersed in a liquid,
wherein particles of said matrix material in said colloidal suspension are of a defined particle
size of less than about 1 µm in diameter, and wherein said biomolecule-binding matrix material
is selected from the group consisting of nitrocellulose, polyvinyl difluoride or and activated
nylon; and

replicate copies of a biologically active biomolecule, wherein said biomolecules are
distributed throughout said colloidal suspension and are bound to said matrix material particles
and wherein said biomolecule is selected from the group consisting of a protein, peptide or and
oligopeptide; and

a blocking biomolecule, wherein said blocking biomolecule blocks unoccupied binding
sites on said biomolecule.

Claim 17 (canceled)

Claim 18 (previously presented): The liquid composition of claim 16, wherein a reference dye is distributed throughout said colloidal suspension and wherein a concentration of said reference dye has a known quantitative relationship with a concentration of said biomolecule-binding matrix material.

Claim 19 (canceled)

Claim 20 (original): The liquid composition of claim 16, wherein said particles of matrix material have a diameter of less than $0.5\mu\text{m}$.

Claim 21 (original): The liquid composition of claim 16, wherein said particles of matrix material have a diameter of less than $0.25\mu\text{m}$.

Claim 22 (canceled)

Claim 23 (canceled)

Claim 24 (canceled)

Claim 25 (canceled)

Claim 26 (canceled)

Claim 27 (canceled)

Claim 28 (canceled)

Claim 29 (canceled)

Claim 30 (previously presented): A powder of microfine particles, said powder comprising an aliquot of the liquid composition of claim 16 from which liquid has been removed.

Claim 31 (currently amended): The powder of claim 30, wherein said particles have a diameter of less than ~~40~~ 1 μm .

Claim 32 (original): The powder of claim 30, wherein said particles have a diameter of between 100 and 500 nm.

Claim 33 (canceled)

Claim 34 (canceled)

Claim 35 (canceled)

Claim 36 (canceled)

Claim 37 (canceled)

Claim 38 (canceled)

Claim 39 (canceled)

Claim 40 (canceled)

Claim 41 (canceled)

Claim 42 (canceled)

Claim 43 (canceled)

Claim 44 (canceled)

Claim 45 (canceled)

Claim 46 (canceled)

Claim 47 (canceled)

Claim 48 (canceled)

Claim 49 (canceled)

Claim 50 (new): The liquid composition of claim 16 wherein the biomolecule is a protein.

Claim 51 (new): The liquid composition of claim 50 wherein the biomolecule-binding matrix material is nitrocellulose

Claim 52 (new): A method for preparing colloidal compositions for use in preparing solid phase biomolecular assays comprising

- a) dispersing a biomolecule-binding matrix material in a liquid medium to form a colloidal suspension of defined particle size of less than 1 µm in diameter, said biomolecule-binding matrix material being selected from the group consisting of nitrocellulose, polyvinyl difluoride and activated nylon;
- b) adding to the liquid medium replicate copies of a biologically active biomolecule, wherein the biomolecules are distributed throughout said colloidal suspension and are bound to the matrix material particles, and wherein said biomolecule is selected from the group consisting of proteins, peptides and oligopeptides; and
- c) incubating the biomolecule/matrix mixture from step (b) with a blocking molecule to occupy unoccupied binding sites on the biomolecule.

Claim 53 (new): The method of claim 52 which includes the additional step of depositing the liquid composition on a solid support.

Claim 54 (new): The method of claim 53 wherein the solid support is prepared from a material selected from the group consisting of glass, plastic and polycarbonate.